## Title II, Part B

## Mathematics and Science Partnership Program

# Missouri High School Science Reform Initiative

## Request for Proposal 2005 Awards

Missouri Department of Elementary and Secondary Education

Craig Rector, Director
Federal Discretionary Grants
P.O. Box 480
205 Jefferson Street
Jefferson City, Missouri 65102-0480

E-Mail: Craig.Rector@dese.mo.gov Phone: 573-526-1594 Fax: 573-526-6698

Postmark Deadline Friday, October 7, 2005

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#### **FAST FACTS**

## MATHEMATICS AND SCIENCE PARTNERSHIP PROGRAM: HIGH SCHOOL SCIENCE REFORM INITIATIVE

**AWARD:** In no instance will an award exceed \$800,000. Grant activities may begin upon grant approval; this is anticipated to be October 21, 2005. All grant activities for year one must end as of September 30, 2006.

**DEADLINE:** All RFPs must be delivered to the Discretionary Grants' Section of the Missouri Department of Elementary and Secondary Education by 4:00 p.m. on Friday, October 7, 2005, or must be postmarked on Friday, October 7, 2005. Faxed or e-mailed applications will not be accepted.

**REQUIREMENT:** To be considered, the Department must receive an original and four copies of the entire package or postmarked by the date specified above.

Listed below are the required components of an acceptable application in the order that they should appear. The narrative sections of the proposal must be double-spaced and the font used must not be smaller than 12-point. The application, not including the appendix, shall not exceed 20 pages. Applicants must adhere to the page limitations on the narrative sections; see the guidance in this RFP packet for complete information. Applicants must not append additional material beyond that allowed in the following list.

- A. Cover Page and Assurances
- B. Abstract
- C. Commitment and Capacity of Partnerships
- D. Project Narrative and Timeline
- E. Bibliography
- F. Evaluation and Accountability Plan
- G. Budget
- H. Budget Narrative
- I. Appendix

**DELIVER RFP TO:** Discretionary Grants' Section

2nd Floor, Jefferson State Office Building

205 Jefferson Street

Jefferson City, Missouri 65102-0480

MAIL RFP TO: Discretionary Grants' Section

205 Jefferson Street

P.O. Box 480

Jefferson City, Missouri 65102-0480

#### **GRANT APPLICATION QUESTIONS:**

Craig Rector, Director

Federal Discretionary Grants

Phone: 573-526-1594 Fax: 573-526-6698

E-mail: Craig.Rector@dese.mo.gov

#### **GRANT PROGRAM QUESTIONS:**

Linda Lacy, Education Consultant, Science Curriculum and Technology Integration

Phone: (573) 751-4608 Fax: (573) 526-7861

E-mail: Linda.Lacy @dese.mo.gov

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### Mathematics and Science Partnership Program: High School Science Reform Initiative Request for Proposal 2005

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# PROGRAM GUIDANCE FOR INSTITUTIONS OF HIGHER EDUCATION, SCHOOL DISTRICTS, AND NONPROFIT ORGANIZATIONS SEEKING A MATHEMATICS AND SCIENCE PARTNERSHIP GRANT HIGH SCHOOL SCIENCE REFORM INITIATIVE

#### I. Introduction/Background

In January of 2002, the No Child Left Behind Act of 2001 (NCLB) became law (see page 15). Title II, Part B of this legislation authorizes a Mathematics and Science Partnership (MSP) competitive grant program. The intent of this program is to encourage local school districts, secondary schools, and institutions of higher education to participate in professional development activities that increase the subject matter knowledge and teaching skills of science teachers. Professional development activities must be sustained, intensive, focused on improving the learning of all students, and aligned to the Missouri Performance standards and the state and local standards for science and mathematics. These activities must result in a demonstrable and measurable improvement in student academic achievement in science.

The need to develop and retain highly qualified teachers in the physical sciences in Missouri is critical to ensuring student proficiency as required by the NCLB act. Current state statistics indicate that a large teacher population does not have certification specifically in physics and/or the physical sciences. Additionally, the number of new science teacher candidates attending state colleges and universities is not sufficient for the current demand. The number of secondary students succeeding in higher-level science and mathematics courses, and who are being admitted to and retained in university science education, science, mathematics, engineering programs, is insufficient to meet the demand for both integrated knowledge of science and skill in applying that knowledge in and out of the teaching field.

An increase in both students and teachers of science, specifically in the field of physics/physical sciences, will require reform in both high school and university level curricula. The Missouri Department of Elementary and Secondary Education (DESE) recognizes the need for both. Funding priority will be given to those grant proposals designed to support a spiraled, student-centered, inquiry-based, "Physics First" curriculum sequence that utilizes appropriate research-based science teaching methodology (e.g., Modeling Instruction Methodology, Socratic questioning, conceptmapping, technology-based instruction).

The Missouri Department of Elementary and Secondary Education (DESE) is issuing a Request for Proposal to high-needs school districts to form partnerships with institutions of higher education and other public schools, regional professional development centers, businesses, and nonprofit or forprofit organizations concerned with science and mathematics education, with the specific intent to implement a program designed to:

- increase the content and pedagogical knowledge of high school physics and/or physical science teachers;
- improve science teaching both at the secondary and higher education levels by improving pedagogical knowledge/skills through academy and clinical learning experiences (e.g., integration of technology-based and research-based teaching methods, including training in modeling methodology);
- increase the number of highly-qualified secondary level teachers of physics and/or physical science;

- create coaching/learning communities designed to develop teacher-leaders who inquire into their own and each other's teaching practices in an effort to improve student achievement;
- develop or redesign curriculum for a conceptual physics course, the first in a sequence of three rigorous courses in science at the secondary level (i.e., "Physics First" high school sequence) that is based on scientific research, aligned with challenging state academic content standards, and object-centered, inquiry-oriented, and concept-based, with end-of-course assessments:
- improve student academic achievement in science and mathematics; and,
- increase the number of students who succeed in higher-level courses in science and who are admitted to and retained in university science and engineering programs.

In order to significantly enhance student achievement and teacher quality in grades 9-11 physics classes, reform involves not only the increased content and pedagogical knowledge of the high school practitioner, but the collaboration of high school science teachers, regional professional development centers, and experts in the fields of science, mathematics, engineering, and science education at institutions of higher education, businesses, and nonprofit or for-profit organizations concerned with science and mathematics education.

to develop professional development opportunities and graduate curricula that contextualize content in support of standards-based curriculum focused on conceptual understanding. It is expected that members of the partnership will work directly with DESE science curriculum and assessment personnel to develop a program with potential for future state-wide replication.

The Missouri Department of Elementary and Secondary Education (DESE) is responsible for the administration of this program and serves in an advisory capacity for program implementation. Funds available for the Mathematics and Science Partnership competitive grant program will be awarded by the Department to support successful proposals submitted by high-need school districts or consortia of districts that have formed partnerships with departments of science, mathematics, engineering, and/or education at Missouri institutions of higher education, including community colleges, regional professional development centers, other schools, businesses, and nonprofit or for-profit organizations concerned with science and mathematics education, that will provide program and resources to improve mathematics and science instruction.

#### **II.** Program Description

- A. Purpose: Missouri places priority on the following objectives:
  - (1) Improve and upgrade the status and stature of science teaching by encouraging institutions of higher education to assume greater responsibility for improving science teacher education through the establishment of a comprehensive, integrated system of recruiting, training, and advising science teachers, especially physics teachers;
  - (2) Build capacity by creating high school teacher-leaders that are both excited and well equipped to provide professional development to fellow science teachers at the local and regional levels;
  - (3) Focus on the education of grades 9-11 science teachers as a career-long process that continuously stimulates teachers' intellectual growth and upgrades teachers' knowledge and skills:
  - (4) Bring grades 9-11 physics/physical science teachers together with science educators, scientists, mathematicians, and engineers to increase the subject matter knowledge of science teachers and improve such teachers' teaching skills through real-world application of physical science concepts, inquiry, technology, computing facilities,

- libraries, and other resources that businesses, industries, and institutions of higher education are better able to provide than the secondary schools;
- (5) Provide sustained professional development that is collaborative and reflective, and supports teachers through follow-up activities and in-class mentoring and coaching;
- (6) Design and implement curriculum for a conceptual physics course, the first in a sequence of three rigorous courses in science at the secondary level (i.e., "Physics First" high school sequence) that is based on scientific research, aligned with the Missouri Show-Me Standards and Science Expectations, and object-centered, inquiry-oriented, and concept-based, with end-of-course assessments;
- (7) Implement professional development opportunities and rigorous science curricular strategies and activities that support the application of concepts to the real world;
- (8) Improve and expand training of science teachers, including training in modeling methodology and the effective integration of inquiry and technology into curricula and instruction; and
- (9) Improve student academic achievement in science and mathematics, and increase the number of students who succeed in higher-level courses in science and who are admitted to and retained in university science and engineering programs.

#### B. Eligibility (eligible partners):

- (1) The proposal shall be submitted by a Missouri school district. The district will act as the administration/fiscal agent for the project. The named administrator/fiscal agent will be responsible for administering all aspects relating to the project, including – but not limited to - coordinating all financial details, completing all forms and assuring that all requirements and guidelines are followed.
- (2) Partnerships applying for a Science Partnership grant must include:
  - (a) A high-need local educational agency or consortia of local educational agencies;
  - (b) An engineering, mathematics, or science department of an institution of higher education; and
  - (c) If present at the institution of higher education, the science teacher training department; and
- (3) Partnerships may also include:
  - (a) Another engineering, mathematics, or science department of higher education;
  - (b) Additional local educational agencies, public charter schools, public or private elementary schools or secondary schools, or a consortium of such schools;
  - (c) A Regional Professional Development Center;
  - (d) A business or businesses: and
  - (e) A nonprofit or for-profit organization of demonstrated effectiveness in improving the quality of mathematics and science teachers.
- (4) Members of the partnership submitting the successful proposal will participate in the post-award meeting to be held the second week of November to develop awareness of the project and discuss details of the implementation plan.
- C. <u>Use of Funds</u>: A partnership shall use funds provided for the following activities:
  - (1) Develop and implement a content-focused science academy that models effective teaching methodology for physics/physical science teachers of grade 9 students that in the future can be scaled-up for statewide replication;

- (2) Create opportunities for enhanced and ongoing professional development of physics/physical science teachers that improve the physics content knowledge of such teachers, and can lead to highly qualified teacher status for those teachers who may lack such qualification;
- (3) Provide follow-up training throughout the year to the academy physics/physical science teachers that shall:
  - (a) Directly relate to the physics curriculum, and focus secondarily on pedagogy;
  - (b) Enhance the ability of the teacher to understand and use the challenging Missouri Science Expectations and to develop and/or revise appropriate curricula;
  - (c) Train teachers to use curricula that are based on scientific research, aligned with the Missouri Science Expectations, and are active learning-oriented, inquiry-based, differentiated to meet diverse student needs, and concept/content-based;
- (4) Provide on a frequent and regular basis in-class modeling, mentoring and coaching to enhance and support regional and summer academy professional development experiences through individual and collegial examination of and reflection on classroom implementation of academy curricula and best practices and teacher efficacy; and
- (5) Share experiences and lessons learned from the partnership's efforts (both professional development efforts and curricula development and implementation) with members of the grades 9-11 science teaching community and members of the higher education teachertraining community outside the partnership in order to increase capacity to support standards-based teaching and learning.
- (6) Compile and deliver a Professional Development packet to the MO DESE at the conclusion of the project. This packet will include the professional development materials (e.g., syllabus, text, teacher resources) and any other necessary components that would enable professional development replication by state and local agencies.
- D. <u>Availability of College or Continuing Education Credit for Participants/Permitted Tuition Rate:</u>
  Proposed projects are expected to provide an opportunity for participating educators to obtain college or university credit in and out of the college/university setting. Educators must be able to attend project activities at no cost and for no credit if they choose. Participants who wish to receive credit are responsible for tuition and fees as described below.
  - If instructor costs are paid with grant funds, the institute of higher education granting the credit may only charge an administrative recording fee to the participants registering for credit.
- E. <u>Duration of Grants</u>: Assuming continued funding, the grant will be awarded for a period of 3 years. Yearly renewal of funding is contingent on satisfactory progress and meeting of established guidelines.
- F. <u>Supplement Not Supplant</u>: Funds received shall be used to supplement, and not supplant, funds that would otherwise be used for proposed activities.
- G. Nonpublic Consultation and Participation
  - (1) In general To ensure timely and meaningful consultation, a local educational agency, educational service agency or consortium of such agencies shall consult with appropriate private school officials in the geographic attendance area of the LEAs participating in this proposal. This consultation must occur during the design and development of the program, under this Act and before the grant application is submitted to DESE, on issues such as:

- (a) how the children's needs will be identified;
- (b) what services will be offered;
- (c) how, where, and by whom the services will be provided;
- (d) how the services will be assessed and how the results of the assessment will be used to improve those services;
- (e) the size and scope of the equitable services to be provided to the eligible private school children, teachers, and other educational personnel and the amount of funds available for those services; and
- (f) how and when the agency, consortium, or entity will make decisions about the delivery of services, including a thorough consideration and analysis of the views of the private school officials on the provision of contract services through potential third-party providers.
- (2) Timing Such consultation shall occur before the agency or consortium makes any decision that affects the opportunities of eligible private school children, teachers, and other educational personnel to participate in programs under this Act.
- (3) Discussion required Such consultation shall include a discussion of service delivery mechanisms that the agency or consortium could use to provide equitable services to eligible private school children, teachers, administrators, and other staff.

The LEA must contact the non-public schools that have submitted a non-public school registration to DESE and are within the geographic attendance area of the LEAs participating in this proposal. If the non-public schools fail to respond, LEA's may send a certified letter as proof that they made an effort to contact the non-public school. Contact the Discretionary Grant office at DESE if there is a problem contacting the non public schools.

Please review "Frequently Asked Questions Regarding Nonpublic Schools/Federal Programs" at <a href="http://dese.mo.gov/divimprove/fedprog/financialmanagement/Nonpublic2003-2004/NonpublicFAQ.pdf">http://dese.mo.gov/divimprove/fedprog/financialmanagement/Nonpublic2003-2004/NonpublicFAQ.pdf</a> for more information on services that can be provided to nonpublic school teaching staff.

#### H. Questions:

Questions concerning completion of the RFP may be directed to:

Craig Rector, Director
Federal Discretionary Grants
Department of Elementary and
Secondary Education
P.O. Box 480, 205 Jefferson Street
Jefferson City, MO 65102-0480

Phone: (573) 526-3232 Fax: (573) 526-6698

E-Mail: <u>Craig.Rector@dese.mo.gov</u>

Questions concerning the programmatic elements of the RFP may be directed to:

Linda Lacy, Ed. Consultant, Science Curriculum & Technology Integration Department of Elementary and Secondary Education P.O. Box 480, 205 Jefferson Street Jefferson City, MO 65102-0480

Phone: (573) 751-4608 Fax: (573) 526-7861

E-Mail: Linda.Lacy @dese.mo.gov

**III. Definitions -** The following definitions are based on the definitions included in the No Child Left Behind Act of 2001.

- A. <u>Highly Qualified Teacher</u>: The term "highly qualified teacher" means the teacher has not had certification or licensure requirements waived on an emergency, temporary, or provisional basis. The teacher has obtained full state certification as a teacher or passed the state teacher licensing examination and holds a license to teach in such state. The teacher possesses a strong background in the content level appropriate for the academic subjects they teach.
- B. <u>Professional Development</u>: The term "professional development" means instructional activities that:
  - (1) Are based on scientifically based research and state academic content standards, student academic achievement standards, and assessment;
  - (2) Improve and increase teachers' knowledge of the academic subjects they teach;
  - (3) Enable teachers to become highly qualified;
  - (4) Are sustained, intensive, and classroom-focused in order to have a positive and lasting impact on classroom instruction and the teacher's performance in the classroom; and
  - (5) Include in-class mentoring and coaching.
- C. <u>Scientifically Based Research</u>: The term "scientifically based research" means research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs and includes research that:
  - (1) Employs systematic, empirical methods that draw on observation or experiment and involve rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions drawn;
  - (2) Relies on measurements or observational methods that provide reliable and valid data across evaluators and observers, across multiple measurements and observations, and across studies by the same or different investigators;
  - (3) Is evaluated using experimental or quasi-experimental designs in which individuals, entities, programs, or activities are assigned to different conditions, with appropriate controls to evaluate the effects of the condition of interest and with a preference for random-assignment experiments or other designs to the extent that those designs contain within-condition or across-condition controls;
  - (4) Ensures that experimental studies are presented in sufficient detail and clarity to allow for replication or, at minimum, to offer the opportunity to build systematically on their findings; and
  - (5) Has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review.
- D. <u>High-Need School District</u>: The term "high-need school district" means a school district that meets at least one of the following criteria:
  - (1) That serves children for which 20 percent of the children are from families with incomes below the poverty line (free and reduced lunch); or
  - (2) That have a high percentage of teachers not teaching in the academic subjects or grade levels that the teachers were trained to teach or that have a high percentage of teachers with emergency, provisional, or temporary certification or licensing; or
  - (3) That has a high percentage of students that are below the proficient level as indicated through the Missouri Assessment Program (MAP).
- E. <u>Academy</u>: The term "academy" means a workshop or institute, conducted during the summer, that:

- (1) Is conducted for a period of not less than 3 weeks with a minimum of 4 day-long follow-up sessions throughout the school year;
- (2) Includes, as a component, a program that provides direct interaction between teachers, higher education staff, and all other partners; and
- (3) Provides for follow-up training during the academic year using learning community models facilitated by a mentor or coach that is conducted in the classroom on a frequent and regular basis during the school year.
- F. <u>Curriculum</u>: The term "curriculum" means a body of information that includes:
  - (1) Content and process standards and expectations;
  - (2) Articulation of the measurable outcomes through grade levels and course sequences;
  - (3) Pre-assessment, formative assessment, and summative assessment activities that measure progress toward mastery;
  - (4) Learning activities, strategies, and resources to be used to construct understanding; and
  - (5) Metacognitive tools for the purposes of reflection on teaching efficacy and learning.
- G. <u>"Physics First" Curriculum Sequence</u>: the term "Physics First" refers to a curriculum sequence that:
  - (1) Recognizes that the understanding of physics concepts is foundational to the understanding of chemistry and biology concepts;
  - (2) Consists of a three course sequence that is comprised of:
  - (a) a first course, conceptual physics for freshmen,
  - (b) second course, conceptual chemistry for sophomores, and
  - (c) third course, biology for juniors,
  - with integration of earth/space/ecology concepts aligned appropriately with the concepts addressed within that curriculum sequence.

#### IV. Proposal Requirements

Each proposal submitted **must** include:

- A. <u>Evidence of Meaningful Partnerships</u>: Partnerships that exhibit characteristics including, but not limited to, the following:
  - (1) Sustainability: A partnership must demonstrate an ability to maintain the targeted activities during and beyond the length of the project and a description of how the partnership will continue the activities funded under this proposal after the original grant period has expired. It is expected that each partnership will establish and continue regional academies by and beyond the end of the grant period, and will serve in an advisory capacity for the development of future projects;
  - (2) Commitment: Evidence of active long-term planning and involvement of all partners must be documented;
  - (3) Capacity: Evidence of the number and quality of staff to carry out the proposed activities and the institutional resources to support the activities must also be included; and
  - (4) Meaningful Consultation and Equitable Services: Evidence of meaningful consultation and equitable services with nonpublic schools located in the geographic attendance area of the LEA participants in this proposal.
- B. <u>Project Plan</u>: Implementation plans that include:
  - (1) Well defined and measurable goals and outcomes;

- (2) Evidence that the planned activities will address the identified measurable outcomes through clear strategies that provide roadmaps to achieving both the long and short term goals and objectives of the program;
- (3) A description of how the activities to be carried out by the eligible partnership will address the most pressing professional development needs of the participating school districts or schools and how these activities will be aligned with challenging State academic content and student academic achievement standards in science;
- (4) A description of how partners will communicate and collaborate to design an effective professional development program, with plans for a minimum of four meetings involving all partners: the high needs school district(s), the Department of Elementary and Secondary Education, institutions of higher education, and others as appropriate to the grant;
- (5) A description of the partnership's governance structure specific to decision-making, communication, and fiscal responsibilities, allowing for the input of all partners as the project is designed, implemented, and monitored; and
- (6) A description of how the eligible partnership will carry out the authorized activities.
- C. <u>Research Base</u>: A description of how the activities to be carried out by the eligible partnership will be based on a review of scientifically based research, and an explanation of how the activities are expected to improve student academic achievement and strengthen the quality of mathematics and science instruction.
- D. <u>Evaluation and Accountability Plan</u>: A comprehensive evaluation and accountability plan that uses valid and reliable quantitative and qualitative data collection and analysis methodology and includes rigorous objectives that measure:
  - (1) Progress toward meeting the measurable goals and objectives established in response to reduce the number of teachers who do not meet the definition of highly qualified teacher;
  - (2) Number of science teachers who participate in content-based professional development;
  - (3) Student academic achievement; and
  - (4) Pre/post-assessment information on teacher content expertise.

DESE will give preference to proposals utilizing external evaluation methods, randomized field trials and/or quasi-experimental evaluation methodology (Note: By themselves, self-reporting perception surveys are not recognized as acceptable data collection and evaluation tools.)

Site Visit(s): During the time period covered by this grant, site visits from the DESE Title II B Grant Coordinator or another representative of DESE may be expected. It is the responsibility of the administrator/fiscal agent to ensure that DESE is kept current as to when the activities that are outlined in the grant application are taking place.

E. <u>Sustainability</u>: A description of how the partnership will continue the activities funded under this proposal after the original grant period has expired.

#### V. Preparation of Application

Listed below are the required components, in the order that they should appear, of an acceptable application. The narrative sections of the proposal must be double-spaced and the font used must not be smaller than 12-point. The application, not including the appendix, shall not exceed 20 pages. Applicants must adhere to the page limitations on the narrative sections, and may not append additional material beyond that allowed in the following list.

- A. <u>Sections I-III Cover Page and Assurances</u>: Use the grant application form provided in the back of the RFP. The cover page should be the first page of the application.
- B. <u>Section IV Abstract</u>: Provide an abstract of the proposal that briefly and concisely describes the program to be implemented and summarizes the intended results of the program. The abstract may not exceed 250 words.
- C. <u>Section V Commitment and Capacity of Partnership</u>: This section shall include a narrative of the roles of the partners and program personnel, and their duties and responsibilities related to the goals and objectives of the project. This section shall also describe the partnership's governance structure specific to decision-making, communication, and fiscal responsibilities. In addition to this narrative section, each application must include in this section:
  - (1) A Partner Identification Form (see Appendix A) for each partner; and
  - (2) A letter of commitment from each partner outlining the role and contributions of the partner and providing evidence that the proposed partnership activities are integral to the partner's instructional mission.
- D. <u>Section VI Project Narrative and Timeline</u>: The program narrative must include a timeline for the implementation of activities and address each of the following items. The narrative section must be double-spaced and may not exceed ten (10) pages.
  - (1) Program Goals and Objectives
  - (2) Program Activities
  - (3) Partnership Meetings
  - (4) Institutional Capacity
  - (5) Follow-up Activities
  - (6) Coordination with Existing Programs and Initiatives
  - (7) Alignment to State Content and Professional Development Standards
  - (8) Research Base to Support Project
- E. <u>Section VII Bibliography</u>: Include a bibliography to support research and other needed references.
- F. <u>Section VIII Evaluation and Accountability Plan</u>: Describe the plan that will be used to evaluate the program during each year of the program. This plan must include:
  - (1) Measurable objectives and annual targets which describe progress toward meeting the goals and objectives established in response to the comprehensive needs assessment and reducing the number of teachers who do not meet the definition of "highly qualified teacher";
  - (2) Measurable objectives to increase the number of science teachers who participate in content-based professional development activities;

- (3) Measurable objectives for improved student academic achievement on Missouri science and mathematics assessments; and
- (4) A description of the data collection and analysis methodology to be used to measure progress toward those objectives and annual targets.
- G. <u>Appendix B and C Budget</u>: Include a three-year total project budget (see Appendix B) in the application. In addition, a Partner Funding Request (see Appendix C) for each partner must be included in the application appendix. Both budgets and the budget narrative must detail proposed expenditures. An example of some of the budget categories is listed below:

6100: Salaries

Salaries & Wages (Professional and Clerical) Teacher Stipends

6200: Employee Benefits

**FICA** 

Non-teacher retirement Insurance

Teacher retirement

Other

6300: Purchased Services

Travel in State
Travel Out of State (attach justification)
Consultants and Contracts

6400: Materials / Supplies

6500: Capital Outlay Equipment

- H. <u>Section IX Budget Narrative</u>: The budget narrative should describe the basis for determining the amounts shown on the project budget page. The budget narrative may be single-spaced. Both the total budget and the narrative description should be aligned with the activities described in the proposal narrative and should reflect any coordinated uses of resources from other sources.
- I. <u>Appendix D</u>: The proposal appendix should include a Statement of Nonpublic School Participation form for each registered nonpublic school in the attendance area of the LEAs represented in this application.

#### VI. Proposal Submission and Review

A. <u>Submission:</u> Applicants must submit an original and four copies of the full proposal to the Department. The original must include an original signature of the authorized institutional official on the cover page. All grant applications must be delivered to the Discretionary Grants' Section of the Missouri Department of Elementary and Secondary Education by 4:00 p.m. on Friday, October 7, 2005, or must be postmarked on Friday, October 7, 2005. Faxed and e-mail applications will not be accepted. Incomplete applications will not be considered. Proposals should be mailed or delivered to:

Craig Rector, Director
Federal Discretionary Grants
Department of Elementary and Secondary Education
P.O. Box 480
205 Jefferson Street
Jefferson City, MO 65102-0480

Phone: (573) 526-3232 Fax: (573) 526-6698

E-mail: Craig.Rector@dese.mo.gov

B. Review Process: As proposals are received at the DESE, they will be reviewed by staff for completeness and compliance with the requirements set forth in Title II, Part B of NCLB to determine applicant eligibility. Any questions about significant omissions from a proposal or about applicant eligibility will be referred to the proposing organization. If, in the judgment of DESE, a proposal is late, significantly incomplete, or an applicant cannot establish its eligibility, the proposal will be omitted from the competition. The decision of DESE is final. Applicants submitting proposals that are withdrawn due to incompleteness or ineligibility will be notified in writing.

An expert review panel will evaluate eligible applications in light of the required application components and the established criteria. The review panel will review each eligible application and make recommendations to DESE in the areas of program, budget, and efficacy. The review panel's scores and recommendations will be the primary determinant of successful proposals and will form the basis for negotiation and final selection. Proposals will be ranked according to the final score assigned by the review panel and selected for funding consideration based upon the following criteria: final score assigned each proposal by the review panel; a cost-effectiveness ratio determined by the relationship between the number of teachers served, the actual amount of teacher-faculty instructional contact time, and the total cost of the program.

Following the review, one partnership will be selected and contacted by DESE staff to discuss any modifications of the project plan that may be required. DESE will seek to fund the proposal that shows the most promise for successful professional development programs.

## C. Review Criteria:

| oes the program leadership team have the expertise to implement and sustain a grades 9-11 Physics academy? (0-4 points) re science educators, mathematicians, scientists, and/or engineers, in and out of higher education institutions, playing ajor roles in the program? (0-4 points) re the roles of all partners identified? (0-4 points) oes the management plan engage all partners in meaningful ways? (0-3 points) there evidence that grades 9-11 physics/physical science teachers from participating schools will provide input into all | 24 |
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| there evidence that grades 9-11 physics/physical science teachers from participating schools will provide input into all   |    |
| ages of program development? (0-3 points)  |    |
| there evidence that the partners share goals, responsibilities, and accountability for the proposed work? (0-3 points) oes the governance structure describe communication, decision-making and fiscal responsibilities among partners? (0-3 points)   |    |
|  | 42 |
| o the goals focus on improved science achievement in grades 9-11 and address training of highly qualified physics achers? (0-5 points)   |    |
| re goals/objectives well defined, measurable and tractable? (0-4 points)   |    |
| re goals and objectives aligned to state expectations and national standards? (0-4 points)   |    |
| o proposed strategies and activities address the established goals? (0-4 points) o proposed strategies and activities provide opportunities to model real world applications? (0-5 points)   |    |
| it clear how and when the partnership will carry out the activities? (0-3 points)  |    |
| re meaningful follow-up activities planned for participants? (0-5 points)  |    |
| re planned activities supported by research on effective professional development practices? (0-5 points)  |    |
| re the mentor/coach criteria for selection, role and responsibilities well articulated? (0-5 points)   |    |
| the planned professional development activities content focused? (0-7 points)  |    |
| variation and recountability i lan   | 21 |
| oes the evaluation plan support DESE priorities and the established goals and objectives of the proposed project? (0-5 pints)  |    |
| oes the evaluation plan include personnel with the expertise to implement the evaluation design and clearly define their les, including plans for external evaluation? (0-4 points)  |    |
| re important outcomes such as teacher content expertise, impact on student achievement and highly- qualified teachers entified and assessed? (0-5 points)  |    |
| re procedures for measuring identified outcomes clearly identified? (0-4 points) (ill the evaluation contribute to continuous improvement? (0-3 points)  |    |
|  |    |
| stitutional Change and Program Sustainability there a clear plan for program continuation after the life of the grant? (0-5 points)  | 15 |
| re obstacles to future funding addressed? (0-3 points)   |    |
| re ways to secure additional funding identified? (0-3 points)  |    |
| o partners provide evidence that the program will lead to change and that changes will be sustainable? (0-4 points)  |    |
| udget and Cost Effectiveness   | 22 |
| there a budget narrative that clearly delineates cost and details concerning reasonable expenditures? (0-3 points) o budgeted items directly relate to established goals and objectives? (0-4 points)  |    |
| oes the budget reflect the involvement of each partner? (0-3 points) the requested budget appropriate to achieve the proposed outcomes with regard to the number of grades 9-11 teachers   |    |
| and students impacted by the proposed activities? (0-3 points) the funding is requested to support the purchase of technological tools, are these essential to reach the proposed  |    |
| utcomes? (0-3 points)  oes the budget reflect that a major portion of the funds will be directed to support and encourage teacher participation?   |    |
| oes me budder reneci mar a major bomon or me innos will be directed to shobon and encourade teacher bandobando a   |    |

#### VII. Award Administration

- A. <u>Notification of the Award</u>: Within thirty days of completion of the review process, the Project Director and chief financial officer will be notified of the status of their proposal.
- B. <u>Award Conditions</u>: For the 2005 competition, the High School Science Partnership award must not exceed \$800,000. DESE expects to fund 1 MSP program with the indicated requirements. Applicants should note that Congress has not yet appropriated any funds for the 2005-2006 or 2006-2007 MSP programs. Second and third year awards are contingent upon this program receiving funding though the U.S. Department of Education and upon DESE's evaluation of the funded programs.
- C. <u>Reporting Requirements</u>: Each eligible partnership receiving a grant must report annually to the U.S. Secretary of Education regarding the eligible partnership's progress in meeting the objectives and annual targets described in the partnership's accountability plan. Eligible partnerships will meet with staff at DESE on a regular basis in evaluating project progress. Mid-year and end of the year reports will be submitted to DESE.

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#### VIII. INSTRUCTIONS FOR THE HIGH SCHOOL SCIENCE REFORM INITIATIVE RFP

Refer to pages 9-11 of the RFP for additional information on completing the RFP packet. Please complete Sections I – III and Appendixes A - D on the RFP forms provided. The narrative sections (Sections IV – IX) should be included with the RFP and organized as described on pages 9 and 10 of the RFP. The narrative sections of the proposal must be double-spaced and the font used must not be smaller than 12-point. The application, not including the appendix, shall not exceed 20 pages. Applicants must adhere to the page limitations on the narrative sections, and may not append additional material beyond that allowed.

**SECTION I - TOTAL BUDGET BY FUNDING CATEGORY**: This section is a summary of your APPENDIX B--Total Budget subtotals and total. Simply duplicate the subtotal and total numbers from each of the APPENDIX B budget classes (6100, 6200, 6300, 6400, 6500 and Total). Indicate the number of teachers to be directly served in both planning and implementation stages of the proposal. This count would include both public and nonpublic teachers. Also indicate which grant year you are applying for by circling the proper year. An authorized Department of Elementary and Secondary Education official will sign this section of the form for all approved final respondents.

**SECTION II - APPLYING INSTITUTION/ORGANIZATION INFORMATION:** Indicate the contact information for the Fiscal Agent and Lead School District and Institution of Higher Education. Additional information about your partners will be collected in APPENDIX A – PARTNER IDENTIFICATION FORM.

**SECTION III - ASSURANCES AND CERTIFICATION:** An authorized representative of the Fiscal Agent must agree to and sign the assurances.

**SECTION IV - ABSTRACT:** Provide an abstract of the proposal that briefly and concisely describes the program to be implemented and summarizes the intended results of the program. The abstract may not exceed 250 words.

<u>SECTION V - COMMITMENT AND CAPACITY OF PARTNERSHIP:</u> This section shall include a narrative of the roles of the partners and program personnel, and their duties and responsibilities related to the goals and objectives of the project. This section shall also describe the partnership's governance structure specific to decision-making, communication, and fiscal responsibilities. In addition to this narrative section, each application must include in this section:

- 1. A Partner Identification Form (Appendix A) for each partner; and
- 2. A letter of commitment from each partner outlining the role and contributions of the partner and providing evidence that the proposed partnership activities are integral to the partner's instructional mission.

<u>SECTION VI - PROJECT NARRATIVE AND TIMELINE:</u> The program narrative must include a timeline for the implementation of activities and address each of the following items. The narrative section must be double-spaced and may not exceed ten (10) pages.

- 1. Program Goals and Objectives
- 2. Program Activities
- 3. Institutional Capacity
- 4. Follow-up Activities
- 5. Coordination with Existing Programs and Initiatives
- 6. Alignment to State Content and Professional Development Standards

7. Research Based to Support Project

**SECTION VII - BIBLIOGRAPHY:** Include a bibliography to support research and other needed references.

**SECTION VIII - EVALUATION AND ACCOUNTABILITY PLAN:** Describe the plan that will be used to evaluate the program during each year of the program. This plan <u>must</u> include:

- Measurable objectives and annual targets which describe progress toward meeting the goals
  and objectives established in response to the comprehensive needs assessment and reducing
  the number of teachers who do not meet the definition of "highly qualified teacher";
- 2. Measurable objectives to increase the number of science teachers who participate in content-based professional development activities; and
- 3. Measurable objectives for improved student academic achievement on Missouri mathematics and science assessments.

APPENDIXES B. AND C. TOTAL BUDGET AND PARTNER FUNDING REQUEST: APPENDIX B describes the use of funds within the budget categories used by the Missouri Public School Accounting System. A description of each category is provided in the material. A brief budget description (for example, under 6100 Salaries: supplemental pay for attendance at professional development activities outside normal operating hours) and the total funds to be expended within each category are required. APPENDIX B must include all money requested by this proposal. APPENDIX B must also include all money expended by the Fiscal Agent for activities that the partners implement. APPENDIX C will provide more detail as to the funds expended by the Fiscal Agent for activities implemented by the partners.

**SECTION IX - BUDGET NARRATIVE:** The budget narrative should describe the basis for determining the amounts shown on APPENDIX B – TOTAL BUDGET page. The budget narrative may be single-spaced. Both the total budget and the narrative description should be aligned with the activities described in the proposal narrative and should reflect any coordinated uses of resources from other sources.

<u>APPENDIX D. STATEMENT OF NONPUBLIC SCHOOL PARTICIPATION:</u> The proposal appendix must include A Statement of Nonpublic School Participation form for each registered nonpublic school in the attendance area of the LEAs represented in this application.

#### IX. FEDERAL LEGISLATION

#### TITLE II, PART B—MATHEMATICS AND SCIENCEPARTNERSHIPS

#### SEC. 2201. PURPOSE; DEFINITIONS.

- (a) PURPOSE.—The purpose of this part is to improve the academic achievement of students in the areas of mathematics and science by encouraging State educational agencies, institutions of higher education, local educational agencies, elementary schools, and secondary schools to participate in programs that—
  - (1) improve and upgrade the status and stature of mathematics and science teaching by encouraging institutions of higher education to assume greater responsibility for improving mathematics and science teacher education through the establishment of a comprehensive, integrated system of recruiting, training, and advising mathematics and science teachers;
  - (2) focus on the education of mathematics and science teachers as a career-long process that continuously stimulates teachers' intellectual growth and upgrades teachers' knowledge and skills;
  - (3) bring mathematics and science teachers in elementary schools and secondary schools together with scientists, mathematicians, and engineers to increase the subject matter knowledge of mathematics and science teachers and improve such teachers' teaching skills through the use of sophisticated laboratory equipment and work space, computing facilities, libraries, and other resources that institutions of higher education are better able to provide than the elementary schools and secondary schools;
  - (4) develop more rigorous mathematics and science curricula that are aligned with challenging State and local academic content standards and with the standards expected for postsecondary study in engineering, mathematics, and science; and
  - (5) improve and expand training of mathematics and science teachers, including training such teachers in the effective integration of technology into curricula and instruction.

#### (b) DEFINITIONS.—In this part:

- (1) ELIGIBLE PARTNERSHIP.—The term 'eligible partnership' means a partnership that—
  - (A) shall include—
    - (i) if grants are awarded under section 2202(a)(1), a State educational agency;
    - (ii) an engineering, mathematics, or science department of an institution of higher education; and
    - (iii) a high-need local educational agency; and

#### (B) may include—

- (i) another engineering, mathematics, science, or teacher training department of an institution of higher education;
- (ii) additional local educational agencies, public charter schools, public or private elementary schools or secondary schools, or a consortium of such schools;
- (iii) a business; or
- (iv) a nonprofit or for-profit organization of demonstrated effectiveness in improving the quality of mathematics and science teachers.

- (2) SUMMER WORKSHOP OR INSTITUTE.—The term 'summer workshop or institute' means a workshop or institute, conducted during the summer, that—
  - (A) is conducted for a period of not less than 2 weeks;
  - (B) includes, as a component, a program that provides direct interaction between students and faculty; and
  - (C) provides for follow-up training during the academic year that is conducted in the classroom for a period of not less than three consecutive or nonconsecutive days, except that—
    - (i) if the workshop or institute is conducted during a 2-week period, the follow-up training shall be conducted for a period of not less than 4 days; and
    - (ii) if the follow-up training is for teachers in rural school districts, the follow-up training may be conducted through distance learning.

#### SEC. 2202. GRANTS FOR MATHEMATICS AND SCIENCE PARTNERSHIPS.

- (a) GRANTS AUTHORIZED.—
  - (1) GRANTS TO PARTNERSHIPS.—For any fiscal year for which the funds appropriated under section 2203 are less than \$100,000,000, the Secretary is authorized to award grants, on a competitive basis, to eligible partnerships to carry out the authorized activities described in subsection (c).
  - (2) GRANTS TO STATE EDUCATIONAL AGENCIES.—
    - (A) IN GENERAL.—For any fiscal year for which the funds appropriated under section 2203 equal or exceed \$100,000,000—
      - (i) if an eligible partnership in the State was previously awarded a grant under paragraph (1), and the grant period has not ended, the Secretary shall reserve funds in a sufficient amount to make payments to the partnership in accordance with the terms of the grant; and
      - (ii) the Secretary is authorized to award grants to State educational agencies to enable such agencies to award subgrants, on a competitive basis, to eligible partnerships to carry out the authorized activities described in subsection (c).
    - (B) ALLOTMENT.—The Secretary shall allot the amount made available under this part for a fiscal year and not reserved under subparagraph (A)(i) among the State educational agencies in proportion to the number of children, aged 5 to 17, who are from families with incomes below the poverty line and reside in a State for the most recent fiscal year for which satisfactory data are available, as compared to the number of such children who reside in all such States for such year.
    - (C) MINIMUM ALLOTMENT.—The amount of any State educational agency's allotment under subparagraph (B) for any fiscal year may not be less than one-half of 1 percent of the amount made available under this part for such year.
  - (3) DURATION.—The Secretary shall award grants under this part for a period of 3 years.
  - (4) SUPPLEMENT, NOT SUPPLANT.—Funds received under this part shall be used to supplement, and not supplant, funds that would otherwise be used for activities authorized under this part.
- (b) APPLICATION REQUIREMENTS.—

- (1) IN GENERAL.—Each eligible partnership desiring a grant or subgrant under this part shall submit an application—
  - (A) in the case of grants awarded pursuant to subsection (a)(1), to the Secretary, at such time, in such manner, and accompanied by such information as the Secretary may require; or
  - (B) in the case of subgrants awarded pursuant to subsection (a)(2), to the State educational agency, at such time, in such manner, and accompanied by such information as the State educational agency may require.
- (2) CONTENTS.—Each application submitted pursuant to paragraph (1) shall include—
  - (A) the results of a comprehensive assessment of the teacher quality and professional development needs of any schools, local educational agencies, and State educational agencies that comprise the eligible partnership with respect to the teaching and learning of mathematics and science;
  - (B) a description of how the activities to be carried out by the eligible partnership will be aligned with challenging State academic content and student academic achievement standards in mathematics and science and with other educational reform activities that promote student academic achievement in mathematics and science;
  - (C) a description of how the activities to be carried out by the eligible partnership will be based on a review of scientifically based research, and an explanation of how the activities are expected to improve student academic achievement and strengthen the quality of mathematics and science instruction;
  - (D) a description of—
    - (i) how the eligible partnership will carry out the authorized activities described in subsection (c); and
    - (ii) the eligible partnership's evaluation and accountability plan described in subsection (e); and
  - (E) a description of how the eligible partnership will continue the activities funded under this part after the original grant or subgrant period has expired.
- (c) AUTHORIZED ACTIVITIES.—An eligible partnership shall use funds provided under this part for one or more of the following activities related to elementary schools or secondary schools:
  - (1) Creating opportunities for enhanced and ongoing professional development of mathematics and science teachers that improves the subject matter knowledge of such teachers.
  - (2) Promoting strong teaching skills for mathematics and science teachers and teacher educators, including integrating reliable scientifically based research teaching methods and technology-based teaching methods into the curriculum.
    - (3) Establishing and operating mathematics and science summer workshops or institutes, including follow-up training, for elementary school and secondary school mathematics and science teachers that---

#### (A) shall—

- (i) directly relate to the curriculum and academic areas in which the teacher provides instruction, and focus only secondarily on pedagogy;
- (ii) enhance the ability of the teacher to understand and use the challenging State

academic content standards for mathematics and science and to select appropriate curricula; and

- (iii) train teachers to use curricula that are—
- (I) based on scientific research:
- (II) aligned with challenging State academic content standards; and
- (III) object-centered, experiment-oriented, and concept- and content-based; and

#### (B) may include—

- (i) programs that provide teachers and prospective teachers with opportunities to work under the guidance of experienced teachers and college faculty;
- (ii) instruction in the use of data and assessments to inform and instruct classroom practice; and
- (iii) professional development activities, including supplemental and followup activities, such as curriculum alignment, distance learning, and activities that train teachers to utilize technology in the classroom.
- (4) Recruiting mathematics, engineering, and science majors to teach through the use of—
  - (A) signing and performance incentives that are linked to activities proven effective in retaining teachers, for individuals with demonstrated professional experience in mathematics, engineering, or science;
  - (B) stipends provided to mathematics and science teachers for certification through alternative routes:
  - (C) scholarships for teachers to pursue advanced course work in mathematics, engineering, or science; and
  - (D) other programs that the State educational agency determines to be effective in recruiting and retaining individuals with strong mathematics, engineering, or science backgrounds.
- (5) Developing or redesigning more rigorous mathematics and science curricula that are aligned with challenging State and local academic content standards and with the standards expected for postsecondary study in mathematics and science.
- (6) Establishing distance learning programs for mathematics and science teachers using curricula that are innovative, content-based, and based on scientifically based research that is current as of the date of the program involved.
- (7) Designing programs to prepare a mathematics or science teacher at a school to provide professional development to other mathematics or science teachers at the school and to assist beginning and other teachers at the school, including (if applicable) a mechanism to integrate the teacher's experiences from a summer workshop or institute into the provision of professional development and assistance.
- (8) Establishing and operating programs to bring mathematics and science teachers into contact with working scientists, mathematicians, and engineers, to expand such teachers' subject matter knowledge of and research in science and mathematics.
- (9) Designing programs to identify and develop exemplary mathematics and science teachers in the kindergarten through grade 8 classrooms.
- (10) Training mathematics and science teachers and developing programs to encourage young women and other underrepresented individuals in mathematics and science careers (including engineering and technology) to pursue postsecondary degrees in majors leading to such careers.

#### (d) COORDINATION AND CONSULTATION.—

(1) PARTNERSHIP GRANTS.—An eligible partnership receiving a grant under section 203 of the Higher Education Act of 1965 shall coordinate the use of such funds with any related activities carried out by such partnership with funds made available under this part.
 (2) NATIONAL SCIENCE FOUNDATION.—In carrying out the activities authorized by this part, the Secretary shall consult and coordinate with the Director of the National Science Foundation, particularly with respect to the appropriate roles for the Department and the Foundation in the conduct of summer workshops, institutes, or partnerships to improve mathematics and science teaching in elementary schools and secondary schools.

#### (e) EVALUATION AND ACCOUNTABILITY PLAN.—

- (1) IN GENERAL.—Each eligible partnership receiving a grant or subgrant under this part shall develop an evaluation and accountability plan for activities assisted under this part that includes rigorous objectives that measure the impact of activities funded under this part.
- (2) CONTENTS.—The plan developed pursuant to paragraph (1)—
  - (A) shall include measurable objectives to increase the number of mathematics and science teachers who participate in content-based professional development activities;
     (B) shall include measurable objectives for improved student academic achievement on State mathematics and science assessments or, where applicable, an International Mathematics and Science Study assessment; and
  - (C) may include objectives and measures for—
    - (i) increased participation by students in advanced courses in mathematics and science;
    - (ii) increased percentages of elementary school teachers with academic majors or minors, or group majors or minors, in mathematics, engineering, or the sciences; and
    - (iii) increased percentages of secondary school classes in mathematics and science taught by teachers with academic majors in mathematics, engineering, and science.
- (f) REPORT.—Each eligible partnership receiving a grant or subgrant under this part shall report annually to the Secretary regarding the eligible partnership's progress in meeting the objectives described in the accountability plan of the partnership under subsection (e).

#### SEC. 2203. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to carry out this part \$450,000,000 for fiscal year 2002 and such sums as may be necessary for each of the 5 succeeding fiscal years.



FOR DESE USE ONLY

## MISSOURI DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION SCHOOL IMPROVEMENT - FEDERAL DISCRETIONARY GRANTS SECTION

#### MATHEMATICS AND SCIENCE PARTNERSHIP PROGRAM REQUEST FOR PROPOSAL – HIGH SCHOOL SCIENCE REFORM PROJECT DATES: OCTOBER 21, 2005 TO SEPTEMBER 30, 2006

| SIGNATURE OF AUTHORIZED DESE OFFICIAL D.         |  |                                | DATE   |                      |                         |              |
|--|--|--------------------------------|--|----------------------|-------------------------|--------------|
| DIRECTIONS                                       |  |                                |  |                      |                         |              |
|  |  |                                | 5 to: Federal Discretion<br>Jefferson City, MO 6 |                      | uri Department of El    | ementary and |
|  | Federal Discretiona dese.mo.gov; Visit [ |                                | 3) 526-3232; Fax: (5<br>dese.mo.gov              | 573) 526-6698; or e- | mail to:                |              |
| SECTION I - TO                                   | TAL BUDGET BY                            | FUNDING CATE                   | EGORY  |                      |                         |              |
| 6100:<br>Salaries                                | 6200:<br>Employee<br>Benefits            | 6300:<br>Purchased<br>Services | 6400:<br>Materials/<br>Supplies                  | SUBTOTAL             | 6500:<br>Capital Outlay | TOTAL        |
|  |  |                                |  |                      |                         |              |
| NUMBER OF TEACH                                  | HERS TO BE SERVED                        | DIRECTLY                       | FIRST YEAR                                       | SECONI               | O YEAR TH               | IRD YEAR     |
| SECTION II – AF                                  | PPLYING INSTITU                          | JTION/ORGANIZ/                 | ATION INFORMAT                                   | TION                 |                         |              |
| APPLYING INSTITU                                 | TION / FISCAL AGEN <sup>-</sup>          | Γ                              |  |                      |                         |              |
| CONTACT ADDRES                                   | S (STREET ADDRESS                        | S, CITY, STATE & ZIP           | -CODE)   |                      |                         |              |
| NAME OF CONTACT                                  |  |                                | NONPROFIT STATUS NUMBER                          |                      |                         |              |
| TELEPHONE NUMBER FAX NUMBER                      |  |                                | E-MAIL ADDRESS                                   |                      |                         |              |
| LEAD SCHOOL DISTRICT                             |  |                                |  | COUNTY DISTRIC       | T CODE                  |              |
| ADDRESS (STREET ADDRESS, CITY, STATE & ZIP-CODE) |  |                                |  |                      |                         |              |
| NAME AND TITLE O                                 | F CONTACT                                |                                | TELEPHONE NUM                                    | BER                  |                         |              |
| E-MAIL ADDRESS                                   |  |                                |  | FAX NUMBER           |                         |              |
| LEAD INSTITUTION OF HIGHER EDUCATION             |  |                                |  |                      |                         |              |
| ADDRESS (STREET ADDRESS, CITY, STATE & ZIP-CODE) |  |                                |  |                      |                         |              |
| NAME AND TITLE O                                 | F CONTACT                                |                                |  | TELEPHONE NUM        | BER                     |              |
| E-MAIL ADDRESS                                   |  |                                | FAX NUMBER                                       |                      |                         |              |

#### **SECTION III – ASSURANCES AND CERTIFICATION**

Should an award of funds from the Mathematics and Science Partnership Program be made to the applicant in support of the activities proposed in this application, the authorized signature on the cover page of this application certifies to the (State Department of Education) that the authorized official will:

- Upon request, provide the Missouri Department of Education with access to records and other sources of information that may be necessary to determine compliance with appropriate federal and state laws and regulations;
- 2. Conduct educational activities funded by this project in compliance with the following federal laws: Title VI of the Civil Rights Act of 1964; Title IX of the Education Amendments of 1972; Section 504 of the Rehabilitation Act of 1973; Age Discrimination Act of 1975; Americans with Disabilities Act of 1990; and Improving America's Schools Act of 1994;
- 3. Use grant funds to supplement and not supplant funds from nonfederal sources;
- 4. Take into account during the development of programming the need for greater access to and participation in the targeted disciplines by students from historically under represented and under served groups;
- 5. Submit, in accordance with stated guidelines and deadlines, all program and evaluation reports required by the U.S. Department of Education and the Missouri Department of Education.
- 6. Ensure that private schools in the attendance area of the public school participating in the Mathematics and Science Partnership Program will be consulted in a timely and meaningful way. The Applicant will arrange for and facilitate the equitable participation of non-public staff in the planning of this project and the participation of non-public educational personnel in professional development activities developed by this proposal as required by Section 9501 of NCLB. See page 3 of RFP for specific details.

The applicant certifies that to the best of his/her knowledge the information in this application is correct, that the filing of this application is duly authorized by the governing body of this organization, or institution, and that the applicant will comply with the attached statement of assurances.

| SIGNATURE OF AUTHORIZED REPRESENTATIVE | IGNATUE | F OF AUTHO | ORIZED REI | PRESENTATIVE |
|--|---------|------------|------------|--------------|
|--|---------|------------|------------|--------------|

DATE

#### **SECTION IV – ABSTRACT**

Provide an abstract of the proposal that briefly and concisely describes the program to be implemented and summarizes the intended results of the program. The abstract may not exceed 250 words.

#### **SECTION V – COMMITMENT AND CAPACITY OF PARTNERSHIP**

This section shall include a narrative of the roles of the partners and program personnel, and their duties and responsibilities related to the goals and objectives of the project. This section shall also describe the partnership's governance structure specific to decision-making, communication, and fiscal responsibilities. In addition to this narrative section, each application must append:

- 1. A Partner Identification Form (Appendix A) for each partner; and
- 2. A letter of commitment from each partner outlining the role and contributions of the partner and providing evidence that the proposed partnership activities are integral to the partner's instructional mission.

#### **SECTION VI – PROJECT NARRATIVE AND TIMELINE**

The program narrative must include a timeline for the implementation of activities and address each of the following items. The narrative section must be double-spaced and may not exceed ten (10) pages.

- 1. Program Goals and Objectives
- 2. Program Activities
- 3. Institutional Capacity
- 4. Follow-up Activities
- 5. Coordination with Existing Programs and Initiatives
- 6. Alignment to State Content and Professional Development Standards
- 7. Research Based to Support Project

#### **SECTION VII – BIBLIOGRAPHY**

Include a bibliography to support research and other needed references.

#### SECTION VIII - EVALUATION AND ACCOUNTABILITY PLAN

Describe the plan that will be used to evaluate the program during each year of the program. This plan <u>must</u> include:

- 1. Measurable objectives and annual targets which describe progress towards meeting the goals and objectives established in response to the comprehensive needs assessment and reducing the number of teachers who do not meet the definition of "highly qualified teacher";
- 2. Measurable objectives to increase the number of science teachers who participate in content-based professional development activities; and
- Measurable objectives for improved student academic achievement on Missouri mathematics and science assessments.

#### **SECTION IX – BUDGET NARRATIVE**

The budget narrative should describe the basis for determining the amounts shown on APPENDIX B – TOTAL BUDGET page. The budget narrative may be single-spaced. Both the total budget and the narrative description should be aligned with the activities described in the proposal narrative and should reflect any coordinated uses of resources from other sources.

#### **SECTION X – APPENDIX**

None of the forms listed below count toward the 20 page maximum length of the proposal. The proposal appendix should include only the following documents:

- 1. A partnership identification form (see Appendix A) for each partner;
- 2. Letters of commitment from each partner;
- 3. A Total Budget form (see Appendix B);
- 4. A partner Funding Request form (see Appendix C) for each partner, and
- 5. A Statement of Nonpublic School Participation form for each registered nonpublic school in the attendance area of the LEAs represented in this application (see Appendix D).

#### SECTION XI – PROPOSAL SUBMISSION AND REVIEW

Applicants must submit an original and four copies of the full proposal to the Department. The original must include an original signature of the authorized institutional official on the cover page. All grant applications must be delivered to the Discretionary Grants' Section of the Missouri Department of Elementary and Secondary Education by 4:00 p.m. on Friday, October 7, 2005, or must be postmarked on Friday, October 7, 2005. Faxed and e-mail applications will not be accepted. Incomplete applications will not be considered. Proposals should be mailed or delivered to:

Craig Rector, Director Federal Discretionary Grants Department of Elementary and Secondary Education 205 Jefferson Street, P.O. Box 480 Jefferson City, MO 65102-0480

Phone: (573) 526-3232 Fax: (573) 526-6698

E-Mail: Craig.Rector@dese.mo.gov

| APPENDIX A – PARTNER IDENTIFICATION FORM Copy this form for each partner that is participating in this proposal |                    |                |  |  |  |
|---|--------------------|----------------|--|--|--|
| Copy this form for each partner that is participating in this proposal.  PARTNERSHIP INSTITUTION                |                    |                |  |  |  |
| NAME AND TITLE OF PRIMARY CONTA   | ACT                |                |  |  |  |
|   |                    |                |  |  |  |
| ADDRESS (STREET ADDRESS, CITY, S  | STATE & ZIP-CODE)  |                |  |  |  |
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| TELEPHONE NUMBER  | FAX NUMBER         | E-MAIL ADDRESS |  |  |  |
| TYPE OF INICTITUTION/OPC ANIZATION  |                    |                |  |  |  |
| TYPE OF INSTITUTION/ORGANIZATION  | N .                |                |  |  |  |
|   |                    |                |  |  |  |
| DESCRIBE THE PARTNER'S MAIN ROL   | E IN THIS PROPOSAL |                |  |  |  |
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|   |                    |                |  |  |  |

| APPENDIX B – TOTAL BUDGET (additional pages may be copied) |        |        |        |
|--|--------|--------|--------|
| BUDGET ITEMIZATION   | YEAR 1 | YEAR 2 | YEAR 3 |
| 6100: Salaries   |        |        |        |
|  |        |        |        |
|  |        |        |        |
|  |        |        |        |
|  |        |        |        |
|  |        |        |        |
| 6100 Subtotal  | \$     |        | \$     |
| 6200: Employee Benefits (optional categories)              |        |        |        |
| FICA   |        |        |        |
| Medicare   |        |        |        |
| Retirement (Teacher or Non-Teacher)                        |        |        |        |
| Health, Life, and/or Dental Insurance                      |        |        |        |
| Other Benefits   |        |        |        |
| 6200 Subtotal  | \$     |        | \$     |
| 6300: Purchased Services                                   |        |        |        |
| Total I didiasa salviosa                                   |        |        |        |
|  |        |        |        |
|  |        |        |        |
|  |        |        |        |
|  |        |        |        |
| 6300 Subtotal  | \$     |        | \$     |
| 6400: Materials/Supplies                                   |        |        |        |
|  |        |        |        |
|  |        |        |        |
|  |        |        |        |
|  |        |        |        |
|  |        |        |        |
|  |        |        |        |
| 6400 Subtotal  | \$     |        | \$     |
| 6100-6400 SUBTOTAL   | \$     |        | \$     |
| 6500: Capital Outlay                                       |        |        |        |
|  |        |        |        |
|  |        |        |        |
|  |        |        |        |
|  |        |        |        |
| 6500 Subtotal  | \$     |        | \$     |
|  |        |        |        |
| TOTAL - (Transfer Subtotal funding areas to SECTION I)     | \$     |        | \$     |

| APPENDIX C – PARTNER FUNDING REQUEST  |                  |                   |                 |
|---|------------------|-------------------|-----------------|
| On this form, list only the funds that this partner will be allocated. Copy the PARTNERSHIP INSTITUTION | is form for each | partner that is r | eceiving funds. |
| BUDGET ITEMIZATION  | YEAR 1           | YEAR 2            | YEAR 3          |
| 6100: Salaries  | YEART            | YEAR 2            | YEAR 3          |
|   |                  |                   |                 |
|   |                  |                   |                 |
|   |                  |                   |                 |
|   |                  |                   |                 |
| 6100 Subtotal   | \$               |                   | \$              |
| 6200: Employee Benefits (optional categories)   |                  |                   |                 |
| FICA<br>Medicare  |                  |                   |                 |
| Retirement (Teacher or Non-Teacher)   |                  |                   |                 |
| Health, Life, and/or Dental Insurance   |                  |                   |                 |
| Other Benefits  |                  |                   |                 |
| 6200 Subtotal   | \$               |                   | \$              |
| 6300: Purchased Services  | Ψ                |                   | Ψ               |
| 6300: Purchased Services  |                  |                   |                 |
|   |                  |                   |                 |
|   |                  |                   |                 |
|   |                  |                   |                 |
|   |                  |                   |                 |
| 6300 Subtotal   | \$               |                   | \$              |
| 6400: Materials/Supplies  |                  |                   |                 |
|   |                  |                   |                 |
|   |                  |                   |                 |
|   |                  |                   |                 |
|   |                  |                   |                 |
| 6400 Subtotal   | ¢                |                   | \$              |
|   | -                |                   |                 |
| 6100-6400 SUBTOTAL  | \$               |                   | \$              |
| 6500: Capital Outlay  |                  |                   |                 |
|   |                  |                   |                 |
|   |                  |                   |                 |
|   |                  |                   |                 |
| 6500 Subtotal   | \$               |                   | \$              |
| TOTAL -   | \$               |                   | \$              |
| TOTAL -   | Ψ                |                   | Ψ               |

#### APPENDIX D - STATEMENT OF NONPUBLIC SCHOOL PARTICIPATION



MISSOURI DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION DIVISION OF SCHOOL IMPROVEMENT – FEDERAL DISCRETIONARY GRANTS

#### STATEMENT OF NONPUBLIC SCHOOL PARTICIPATION

TITLE II: PART B: MATHEMATICS AND SCIENCE PARTNERSHIP PROGRAM

| NAME OF I | NONPUBLIC SCHOOL  | TELEPHONE NUMBER   |  |  |  |  |
|-----------|---|--|--|--|--|--|
| NAME OF N | NONPUBLIC SCHOOL CONTACT PERSON   | NAME OF SCHOOL DISTRICT IN WHICH NONPUBLIC SCHOOL IS LOCATED |  |  |  |  |
|           |   |  |  |  |  |  |
| DIREC     |   |  |  |  |  |  |
| To be c   | ompleted by each registered nonpublic school in the public school district ar   | nd submitted with the district's application.                |  |  |  |  |
|           | Mail the completed form to: Federal Discretionary Grants, Missouri Department of Elementary and Secondary Education, PO Box 480, Jefferson City, MO 65102-0480  |  |  |  |  |  |
|           | Questions, contact Federal Discretionary Grants: Ph: (573) 526-3232; Fax: (573) 526-6698; or e-mail to: <a href="mailto:webreplyimprfdg@dese.mo.gov">webreplyimprfdg@dese.mo.gov</a>  |  |  |  |  |  |
| PLEAS     | E CHECK THE MOST APPROPRIATE STATEMENT:   |  |  |  |  |  |
|           | 1. Administrator and/or teachers in my school have been involved in the planning of this project. I plan for my teachers and/or students to participate in these programs.  |  |  |  |  |  |
|           | 2. I was invited to participate in planning but chose not to do so. My sch  | ool will not participate in this program.                    |  |  |  |  |
|           | <ol> <li>Administrators and/or teachers in my school have been involved in the<br/>participate in these programs because of philosophical, religious, or</li> </ol>   |  |  |  |  |  |
|           | 4. Administrators and/or teachers in my school have been involved in the planning of this project, but the options for nonpublic participation does not seem equitable. Until changes are made for equitable options, I do not plan for my teachers to participate.   |  |  |  |  |  |
|           | 5. Administrators and/or teachers in my school have not been properly involved in the planning of this project. I need more information before I can decide whether or not my school should participate.  |  |  |  |  |  |
|           | <ul> <li>ASSURANCES: Title IX of No Child Left Behind Act includes the following consultation requirements concerning the participation of nonpublic schools in Title II: Part B: Mathematics and Science Partnership Program.</li> <li>1. In general - To ensure timely and meaningful consultation, a local educational agency, educational service agency or consortium of such agencies shall consult with appropriate private school officials in the geographic attendance area of the LEAs participating in this proposal. This consultation must occur during the design and development of the program, under this Act and before the grant application is submitted to DESE, on issues such as: <ul> <li>(A) how the children's needs will be identified;</li> <li>(B) what services will be offered;</li> <li>(C) how, where, and by whom the services will be provided;</li> <li>(D) how the services will be assessed and how the results of the assessment will be used to improve those services;</li> <li>(E) the size and scope of the equitable services to be provided to the eligible private school children, teachers, and other educational personnel and the amount of funds available for those services; and</li> <li>(F) how and when the agency, consortium, or entity will make decisions about the delivery of services, including a thorough consideration and analysis of the views of the private school officials on the provision of contract services through potential third-party providers.</li> </ul> </li> </ul> |  |  |  |  |  |
| 2.        | 2. Timing - Such consultation shall occur before the agency or consortium makes any decision that affects the opportunities of eligible private school children, teachers, and other educational personnel to participate in programs under this Act.   |  |  |  |  |  |
| 3.        | <ol> <li>Discussion required - Such consultation shall include a discussion of service delivery mechanisms that the agency or consortium<br/>could use to provide equitable services to eligible private school children, teachers, administrators, and other staff.</li> </ol>   |  |  |  |  |  |
| COMMENTS: |   |  |  |  |  |  |
|           |   |  |  |  |  |  |
| ORIGINAL  | SIGNATURE OF NONPUBLIC OFFICIAL   | DATE   |  |  |  |  |